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November 13, 1992

Via Federal Express

Mr. Daniel W. McGovern
Regional Administrator
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Re: Quemetco, Inc., City of Industry, California
Request for Two-Year Secondary Containment Variance
Pursuant to 40 C.F.R. Section 264.1101(b)(4)

Dear Mr. McGovern:

RSR Corporation (RSR), on behalf of its wholly-owned subsidiary Quemetco, Inc. (Quemetco), hereby submits this request for a two-year variance from the secondary containment requirements for containment buildings, as provided in 40 C.F.R. Section 264.1101(b)(4). Quemetco is a secondary lead smelter located at 720 South Seventh Avenue, City of Industry, California, 91745.

Quemetco's submission of this variance should not be construed by EPA as a waiver of Quemetco's belief that the materials it manages in its building are not solid waste under the Resource Conservation and Recovery Act (RCRA). Neither should EPA construe this submission to mean that Quemetco believes its building requires permitting under RCRA. Nonetheless, Quemetco is submitting this variance request in the event it concludes the unit requires permitting.

RSR was the first secondary lead smelter in the U.S. to construct containment buildings at its facilities and has spent approximately \$40 million in constructing these buildings. RSR participated extensively in EPA's development of the containment building standards. In fact, EPA produced a video of several of RSR's facilities, including Quemetco, for use as guidance by EPA personnel in evaluating and inspecting containment buildings. Thus, RSR's facilities will be the model against which all other

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containment buildings will be measured for compliance with the Subpart DD requirements.

Quemetco's building meets the final standards for containment buildings. Nonetheless, pursuant to 40 C.F.R. Section 264.1101(b)(4), Quemetco respectfully requests a two-year variance from the secondary containment requirements for its containment building. This two-year variance will allow Quemetco time to evaluate its existing containment system and, where necessary, to refine the system.

Background

On August 18, 1992, the Environmental Protection Agency (EPA) promulgated a final rule creating a new type of waste management unit called "containment buildings." See 57 Fed. Reg. 37194. In the final rule, EPA reiterated its belief that certain materials prohibited from land disposal must be stored for short periods of time to facilitate recycling, recovery, or treatment and that some of these materials are not amenable to management in tanks or containers. Lead slag was cited as an example of these materials, as were battery parts and groups that must be staged before being smelted.

EPA also stated that containment buildings may be used to stage these materials and that these buildings are not land disposal units, provided certain design criteria are met. Under the final rule, therefore, prohibited materials can be stored in containment buildings without first meeting a treatment standard under the RCRA land disposal restrictions.

The design and operating standards EPA established for containment buildings are intended to ensure containment equivalent to the containment achieved by tanks. Generally, the units must be designed to contain releases through primary and in some cases secondary containment systems and to contain potential particulate emissions.

All containment buildings must be equipped with a primary barrier designed and constructed of materials to prevent materials from migrating beneath or outside the unit. The design and construction of the primary barrier can vary, depending upon the type of material to be managed in the unit. For example, for containment buildings used to manage materials without free liquids, the primary barrier may be a concrete floor if the materials will not migrate into the concrete matrix.

Containment buildings used to manage materials containing any free liquids must have a primary barrier system capable of preventing migration of hazardous constituents into the barrier and a liquid collection and removal system that will minimize standing liquid on the primary barrier. For the liquid collection and removal system, EPA states in the final rule that, at a minimum, a one degree slope for the primary barrier in tandem with an appropriate means for collecting and removing liquids (e.g., troughs, drains, dikes, sumps, pumps) will meet this goal.

In all cases, the primary barrier must be designed to withstand the movement of personnel, materials and handling equipment in the unit. By this, EPA means that coatings or membranes that might be exposed to abrasion or tearing must be sufficiently durable or protected. The primary barrier must be maintained free of gaps, cracks, corrosion or other deterioration.

Any portion of a containment building used to manage materials containing free liquids must also have secondary containment that includes a secondary barrier and a leak detection system. The secondary barrier must be constructed of materials to prevent the migration of hazardous constituents. The leak detection system must be capable of detecting, collecting, and removing leaks of hazardous constituents through the primary barrier at the earliest practical time.

Criteria for Two-Year Variance

In the final rule EPA provided a two-year period to comply with the secondary containment requirements. See 40 C.F.R. Section 264.1101(b)(4). To qualify for the extension, an owner or operator must demonstrate that the unit substantially meet all other standards spelled out in the rule.

In addition, written notice must be provided to the Regional Administrator of the request for a variance by November 16, 1992. This notification must describe the unit and its operating practices with specific reference to the performance of the existing containment systems and specific plans for retrofitting the unit with secondary containment.

Quemetco's Demonstration

Quemetco has essentially completed construction of Phase I of its building project. Phase II will begin in the very near future. Quemetco's Phase I construction and its pending Phase II

construction will meet or exceed the requirements for containment buildings set forth in 40 C.F.R. Part 264 Subpart DD.

Section 264.1101(a)(1) requires that the containment building be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements and to ensure containment of managed materials. Quemetco's building will be enclosed with a secondarily contained floor constructed of two layers of epoxy-coated concrete overlaying a barrier of structural concrete, walls constructed of epoxy-coated concrete and structural concrete, and a wooden roof. Temporary wall structures are being used until completion of the Phase II construction.

Section 264.1101(a)(2) requires that the floor and containment walls of the containment building, including the secondary containment system, be designed and constructed of materials of sufficient strength and thickness to support themselves, the materials, and any personnel and heavy equipment that operate within the unit. In addition, the floor and walls must withstand failure due to pressure gradient, settlement, compression, uplift, physical contact with the material to which they are exposed, climatic conditions, and the stress of daily operation, including movement of heavy equipment within the unit and the contact of such equipment with containment walls.

Quemetco's containment building plainly meets these standards. It was designed to contain materials handled within the building. The building is designed and constructed of materials of sufficient strength and thickness to support themselves, the materials, and any personnel and heavy equipment that operate within the unit. In addition, the floor and walls must withstand failure due to pressure gradient, settlement, compression, uplift, physical contact with the material to which they are exposed, climatic conditions, and the stress of daily operation, including movement of heavy equipment within the unit and the contact of such equipment with containment walls.

Under Section 264.1101(a)(3), incompatible materials must not be placed in the unit or its secondary containment system if the materials could cause the unit or secondary containment system to leak, corrode or otherwise fail. The materials handled in the building generally include battery electrolyte and lead. These materials are compatible with the primary and secondary containment systems. The primary barrier is constructed of epoxy-coated concrete and structural concrete. This primary barrier was chosen for a number of reasons, including its compatibility with the stored materials.

Section 264.1101(a)(4) requires that a containment building have a primary barrier designed to withstand the movement of personnel, material and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the material to be managed in the unit. The design of Quemetco's primary barrier system is described above and clearly meets this standard.

Under Section 264.1101(b), a containment building used to manage materials containing free liquids or treated with free liquids (the presence of which is determined by the Paint Filter Liquids Test, a visual examination, or other appropriate means), the building must have: (1) a primary barrier designed to prevent the migration of hazardous constituents into the barrier; (2) a liquid collection and removal system to minimize the accumulation of liquid on the primary barrier; (3) a secondary containment system including a secondary barrier designed and constructed to prevent the migration of hazardous constituents into the barrier; and (4) a leak detection system that is capable of detecting a failure of the primary barrier and collecting accumulated hazardous materials and liquids at the most practical time.

Quemetco's primary and secondary systems meet these standards. The primary barrier is constructed of two layers of epoxy-coated concrete overlaying a barrier of structural concrete. The primary surface is sloped to a sump that removes any liquids transferred from the primary barrier.

The secondary containment system is constructed of a sand drainage layer overlying a PVC liner and a sub-liner of clay subsoils. The secondary containment system was designed to prevent migration of hazardous constituents into the barrier. The secondary containment system is sloped to the leak detection port. As described below, Quemetco is requesting the two-year variance primarily to gauge the overall performance of this secondary containment system.

Under Section 264.1101(c), owners and operators of containment buildings must use controls and practices to ensure containment of material within the unit. At a minimum, the owner or operator must: (1) maintain a primary barrier free of significant gaps, cracks, corrosion, and other deterioration that would cause materials to be released from the primary barrier; (2) maintain the level of stored material within the containment walls of the unit so that the height of any containment wall is not exceeded; (3) take measures to prevent the tracking of materials out of the unit by personnel or equipment used in the handling of

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the material; and (4) take measures to control fugitive dust emissions such that any openings exhibit no visible emissions.

Quemetco's building meets these standards. First, the primary barrier is constructed of epoxy-coated concrete and structural concrete. Visible areas of the floor are inspected on a weekly basis, and significant deterioration or gaps discovered during these inspections will be corrected on an as needed basis. Second, personnel are instructed to ensure that materials are not stored above the height of the containment walls. Third, a vehicle wash station is maintained at the building to wash vehicles moving out of the building. Washwater is collected and transferred to the facility's water treatment plant. Fourth, fugitive dust emissions are controlled to ensure that no visible emissions are exhibited at any opening. Currently, Quemetco uses two (2) 50,000 CFM baghouse/HEPA filter units to achieve the no visible emissions standard.

Section 264.1101(c)(2) requires that an owner or operator of a containment building have a certification by a qualified registered professional engineer that the containment building design meets the requirements of Section 264.1101(a) - (c). Quemetco will obtain this certification if permitting is pursued.

Requirements on the management of ignitable or reactive and incompatible materials are provided in Section 264.1101(a)(3). Quemetco does not manage ignitable or reactive and incompatible materials in the building.

Section 264.1101(c)(4) requires an owner or operator of a containment building to inspect and record in the facility's operating record, at least once every seven days, data gathered from the monitoring equipment and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases.

Quemetco's building leak detection system consists of an inspection port to which all collected liquids are shunted. This port is inspected at least once every seven days. The area immediately surrounding the containment building also is inspected at least weekly to ensure that there is no evidence or signs of releases.


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Reason for Variance Request

Pursuant to Section 264.1101(b)(4) Quemetco requests a two-year variance from the secondary containment requirements so that Quemetco may evaluate the overall performance of its existing containment system and, where necessary, to refine the system.

We trust the foregoing information is sufficient for you to make a favorable decision regarding our request. If you or your staff have any questions or require additional information please call me or Guy Lee IV at (214) 631-6070.

Sincerely,



Gerald A. Dumas
Vice President
Environmental Services
RSR Corporation